IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No.: 09/976,591 Applicant: Tao Chen, et al. Filed: October 12, 2001 Examiner: Hom, Shick C Art Unit: 2616 Customer No. 23696 Confirm. No.: 2233 Docket No.: 020020	**Certificate of Transmission/Mailing** I hereby certify that this correspondence is being facsimile transmitted to the USPTO, transmitted via the Office electronic filing system addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below: April 14, 2009 /Gina Golia/ Date Gina Golia

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

In response to the Final Office Action of January 16, 2009 and the Notice of Appeal filed herewith, Applicant respectfully requests review of the following remarks and arguments.

REMARKS/ARGUMENT

Applicant respectfully submits that clear error exists in the rejection of claims 1-5, 7, 26-32 and 34 under 35 USC § 103(a). The claims were twice rejected as being unpatentable over US Patent Publication No: 2002/0080887 to Jeong in view of US Patent No.: 5,351,087 to Christopher.

Claims 1 and 26 are independent claims. Claims 2-5, 7, 27-32 and 34 depend from claims 1 and 26.

BACKGROUND

Claim 1: An encoding method for reducing decoding complexity, the method comprising:

encoding systematic bits of a bit stream in each of a plurality of buffers with a first code, the first code being an outer code;

multiplexing content of the plurality of buffers from the bit stream; and

encoding said multiplexed content with a second code to provide a set of frames, wherein the encoding said multiplexed content comprises identifying a block of bits to be encoded and then coding the block of bits with the second code, the second code being an inner code.

Claim 26: An apparatus for reducing decoding complexity, comprising:

a plurality of buffers;

a plurality of outer encoders, each of said plurality of encoders being communicatively coupled to one of said plurality of buffers wherein said plurality of buffers are configured to receive systematic bits from a bit stream;

a multiplexer communicatively coupled to said plurality of buffers; and

an inner encoder communicatively coupled to said multiplexer, wherein the inner encoder is configured to identify a block of bits to be encoded and encode the block of bits with an inner code.

In the previous two Office Actions, Applicant argued that Jeong and Christopher individually and in combination failed to disclose all of the required limitations.

In the Office Action of January 16, 2009, The Examiner re-asserted that although Jeong fails to disclose an interleaver that Christopher does. (Office Action, Page 5, Lines 3-6). The Examiner also re-asserted that an interleaver is a multiplexer because the abstract of Christopher recites a multiplexer that is used to interleave signals. (Office Action, Page 5, Lines 12-15). The Examiner argued that it would have been obvious to one skilled in art to substitute the multiplexer of Leong with the interleaver of Christopher. (Office Action, Page 5 Line 16, Page 6, Line 3).

In the Office Action of January 16, 2009, the Examiner also clarified his rejection explaining "Clearly a buffer is merely a device or area used to store data temporarily and deliver at a rate different from that at which it was received, clearly encoders 11-14 read on the buffers". (Office Action, Page 2, Lines 9-12). The Examiner also averred "Clearly interleavers 40 and interleavers 60 of Leong should be replaced with the multiplexers of Christopher. (Office Action, Page 2, Lines 13-15).

FIRST CLEAR ERROR

The Examiner's conclusion that because the abstract of Christopher recites a multiplexer that is used to interleave signals, a multiplexer must be an interleaver is clearly wrong. (Office Action, Page 5, Lines 12-15). A multiplexer is not an interleaver. Christopher may be using a multiplexer in combination with other elements to interleave signals but this does not make an interleaver a multiplexer. Thus, it is improper to conclude as the Examiner does, that the interleavers of Jeong are in fact multiplexers. (Office Action, Page 5, Line 19).

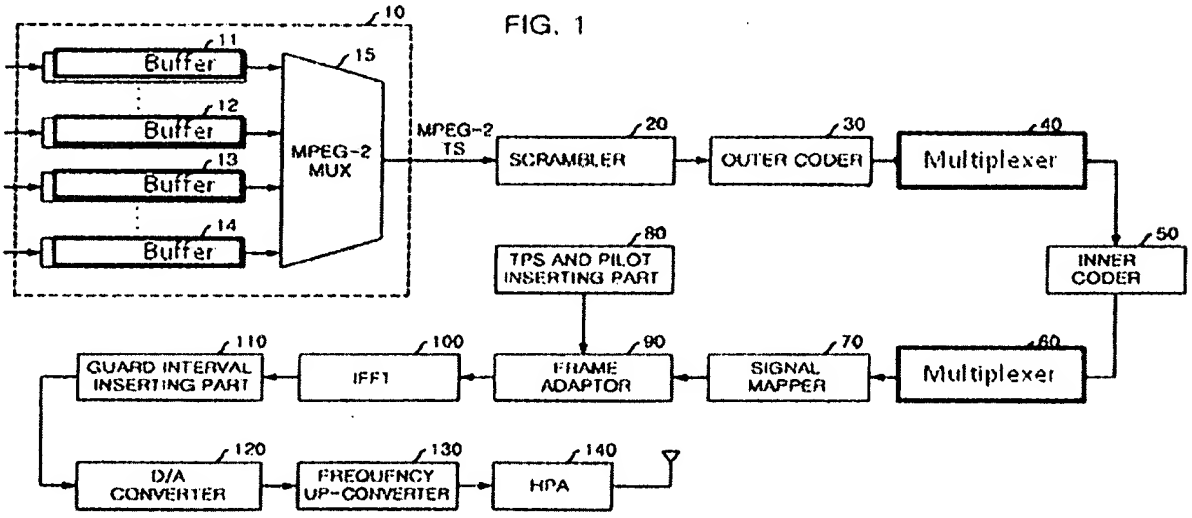
Moreover, as one skilled in the art understands, arbitrarily replacing interleavers with multiplexers in a device almost certainly renders the device inoperative for its intended purposes.

SECOND CLEAR ERROR

Even if, arguendo, the outer interleaver 40 and the inner interleaver 60 of Jeong were replaced with multiplexers, and the audio encoders of Jeong were replaced with buffers as proposed by the Examiner, the proposed substitution still does not arrive at the invention of claims 1 and 26.

Figure 1 of Jeong is shown below with the outer interleaver 40 and inner interleaver 60 replaced with multiplexers 40, 60 as proposed by the Examiner and the audio encoders replaced with buffers 11, 12, 13 and 14 as proposed by the Examiner.

FIG. 1



Claim 1 requires:

encoding systematic bits of a bit stream in each of a plurality of buffers with a first code and multiplexing content of the plurality of buffers from the bit stream.

Studying the proposed combination shown above, bits from buffers 11, 12, 13 and 14 are processed in MPEG MUX-2 15 and scrambled in scrambler 20 before they reach outer coder 30. Thus, the bits of buffers 11, 12, 13 and 14 are not encoded as required by claim 1. Instead the

bits of the buffers are multiplexed and scrambled, with multiplexed and scrambled bits being encoded by outer coder 30 and not the bits in buffers 11, 12, 13 and 14.

Claim 26 requires:

a plurality of outer encoders, each of said plurality of encoders being communicatively coupled to one of said plurality of buffers wherein said plurality of buffers are configured to receive systematic bits from a bit stream; and a multiplexer communicatively coupled to said plurality of buffers.

Studying the proposed combination shown above bits from buffers 11, 12, 13 and 14 are processed in MPEG MUX-2 15 and scrambled in scrambler 20 before they reach outer coder 30. Thus, buffers 11, 12, 13 and 14 are not communicatively coupled to the outer coder as required by claim 1. Instead, the buffers provide bits for MPEG MUX-2 15, the provided bits are further multiplexed and scrambled, with the multiplexed and scrambled bits eventually being encoded by outer coder 30. The outer coder therefore is not communicatively coupled to buffers 11, 12, 13 and 14 because encoding does not take place within buffers 11, 12, 13 and 14.

CONCLUSION

Applicant respectfully submits that the application is now in condition for allowance, for which early action is requested. Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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